

Listing of Claims:

1. (currently amended) A method of capturing an image by use of a camera, the method comprising:

placing a scene within a field of vision of a wide-angle lens coupled to the camera;

storing image data of the scene in an image collection array;

digitizing the scene image data into a digitized scene image data and storing the digitized scene image data in memory;

selecting a plurality of subsets of the digitized scene image data; and

performing distortion compensation on the selected subsets of the digitized scene image data to compensate for distortion caused by the wide-angle lens.

2. (original) The method of claim 1 wherein the plurality of subsets of the digitized scene image data are selected serially.

3. (original) The method of claim 1 further comprising:

reconstructing the selected plurality of subsets into an integrated output image.

4. (original) The method of claim 1 wherein a subset corresponds to a focus area in the scene.

5. (original) The method of claim 1 wherein the camera is used to transmit images on a network.

6. (original) The method of claim 1 wherein the camera is communicatively coupled to a set top box that is capable of transmitting images over data streams in a network.

7. (original) The method of claim 1 wherein the selecting the subsets is controlled by a set top box that is capable to transmit images across a network.

8. (original) The method of claim 1 wherein the selecting the subsets is controlled by the camera that is capable to transmit images across a network.

9. (original) The method of claim 1 wherein the selecting the subsets is controlled by a processor device.

10. (previously presented) The method of claim 1 wherein the performing distortion compensation is controlled by a processor device.

11. (previously presented) The method of claim 1 wherein the performing distortion compensation is controlled by a set top box that is capable to transmit images across a network.

12. (original) The method of claim 1 wherein the camera is communicatively coupled to a companion box that is capable to control a set top box for transmitting images across a network.

13. (original) The method of claim 1 wherein the selecting the subsets is controlled by a companion box that is capable to control a set top box for transmitting images across a network.

14. (previously presented) The method of claim 1 wherein the distortion compensation is controlled by a companion box that is capable to control a set top box for transmitting images across a network.

15. (canceled)

16. (previously presented) The method of claim 1, further comprising:
performing compression on the selected subsets of the digitized scene image data.

17. (original) The method of claim 1, further comprising:
transmitting the selected subsets of the digitized scene image data to a destination device.

18. (original) The method of claim 1 wherein one of the selected subsets of the digitized scene image data is selected based on detected activity in the scene.

19. (original) The method of claim 1 wherein one of the selected subsets of the digitized scene image data is selected based on a location relative to another one of the selected subsets.

20. (original) The method of claim 1 wherein one of the selected subsets of the digitized scene image data is selected based on a command signal.

21. (original) The method of claim 1 wherein at least two of the selected subsets are overlapping.

22. (original) The method of claim 1 wherein at least two of the selected subsets are non-overlapping.

23. (previously presented) A method of controlling the capture of an image of an object in a camera field of vision, the method comprising:

storing, in an image collection array, data of a scene within the field of vision of a wide-angle lens;

storing, in memory, digitized data of the scene within the field of vision;

selecting a plurality of subsets of the digitized data of the scene;

performing distortion compensation on each of the plurality of subsets of the digitized data of the scene to correct for distortion caused by the wide-angle lens; and

transmitting individually each of the subsets of distortion compensated digitized data to a destination device for simultaneous display thereon.

24. (original) The method of claim 23 wherein the plurality of subsets of the digitized scene image data are selected serially.

25. (original) The method of claim 23 further comprising:

reconstructing the selected plurality of subsets into an integrated output image.

26. (original) The method of claim 23 wherein a subset corresponds to a focus area in the scene.

27. (original) The method of claim 23 wherein the camera is used to transmit images in a network.

28. (original) The method of claim 23 wherein the camera is communicatively coupled to a first unit that is capable to transmit images in a network.

29. (original) The method of claim 23 wherein the selecting the subsets is controlled by a first unit that is capable to transmit images in a network.

30. (canceled)

31. (original) The method of claim 23 wherein the camera is communicatively coupled to a companion unit that is capable of being communicatively coupled to a first unit for transmitting images in a network.

32. (original) The method of claim 23 wherein the selecting the subsets is controlled by a companion unit that is capable of being communicatively coupled to a first unit for transmitting images in a network.

33. (canceled)

34. (original) The method of claim 23 wherein the camera is communicatively coupled to a processing device.

35. (original) The method of claim 23 wherein the selecting the subsets is controlled by a processing device.

36. (canceled)

37. (previously presented) The method of claim 23, further comprising:
performing compression on the selected subsets of the digitized data of the scene.

38. (previously presented) The method of claim 23, further comprising:
simultaneously displaying each of the subsets of the digitized data of the scene on a destination device.

39. (original) The method of claim 23 wherein one of the selected subsets of the digitized scene image data is selected based on detected activity in the scene.

40. (original) The method of claim 23 wherein one of the selected subsets of the digitized scene image data is selected based on a location relative to another one of the selected subsets.

41. (original) The method of claim 23 wherein one of the selected subsets of the digitized scene image data is selected based on a command signal.

42. (original) The method of claim 23 wherein at least two of the selected subsets are overlapping.

43. (original) The method of claim 23 wherein at least two of the selected subsets are non-overlapping.

44. (currently amended) An article of manufacture, comprising:
a machine-readable medium having stored thereon instructions to:
store image data of a scene in an image collection array captured by a wide-angle lens having an angular field of view of at least about 140 degrees;
digitize the scene image data into a digitized scene image data and store the digitized scene image data in memory;
select a plurality of subsets of the digitized scene image data; and
perform distortion compensation on the selected subsets of the digitized scene image data to compensate for distortion caused by the wide-angle lens.

45. (currently amended) An article of manufacture, comprising:
a machine-readable medium having stored thereon instructions to:
store, in an image collection array, data of a scene within a field of vision of a fish-eye lens of a camera;

store, in memory, digitized data of the scene within the field of vision;
select a plurality of subsets of the digitized data of the scene; and
perform distortion compensation on the selected subsets of the digitized data of the scene to compensate for distortion caused by the fish-eye lens.

46. (currently amended) An apparatus for controlling an image captured by a fish-eye lens of a camera, the apparatus comprising:

a unit capable of being communicatively coupled to the camera, and capable to store digitized data of a scene within a field of vision of the camera;

the unit including a webcam engine capable to select a plurality of subsets of the stored digitized data of the scene;

the unit further including a processor communicatively coupled to the webcam engine and capable to execute the webcam engine to permit the selection of the subsets of the stored digitized data; and

an image correction module communicatively coupled to the processor and capable to perform distortion compensation on the selected subsets to compensate for distortion caused by the fish-eye lens.

47. (original) The apparatus of claim 46 wherein the plurality of subsets of the digitized scene image data are selected serially.

48. (original) The apparatus of claim 46 further comprising:

a reconstruction stage communicatively coupled to the webcam engine and capable to reconstruct the selected plurality of subsets into an integrated output image.

49. (original) The apparatus of claim 46 wherein a subset corresponds to a focus area in the scene.

50. (original) The apparatus of claim 46 wherein one of the selected subsets of the digitized scene image data is selected based on detected activity in the scene.

51. (original) The apparatus of claim 46 wherein one of the selected subsets of the digitized scene image data is selected based on a location relative to another one of the selected subsets.

52. (original) The apparatus of claim 46 wherein one of the selected subsets of the digitized scene image data is selected based on a command signal.

53. (original) The apparatus of claim 46 wherein at least two of the selected subsets are overlapping.

54. (original) The apparatus of claim 46 wherein at least two of the selected subsets are non-overlapping.

55. (canceled)

56. (original) The apparatus of claim 46 wherein the unit is a set top box.

57. (original) The apparatus of claim 46 wherein the unit is a processor.

58. (original) The apparatus of claim 46 wherein the unit is a companion box.

59. (currently amended) An apparatus for controlling the capture of an image of an object, the apparatus comprising:

a wide-angle lens capable to capture a scene within a wide angular field of vision of the lens of at least about 140 degrees;

an image collection array communicatively coupled to the wide-angle lens and capable to store data of the scene within the wide field of vision;

a memory communicatively coupled to the image collection array and capable to store digitized data of the scene within the wide field of vision; and

a processing stage communicatively coupled to the memory and capable to select a plurality of subsets of the digitized data of the scene in order to generate an image of the captured scene, wherein the processing stage further includes an image correction engine communicatively coupled to

the processor and capable to perform distortion compensation on the selected subsets to compensate for distortion caused by the wide-angle lens.

60. (original) The apparatus of claim 59 wherein the plurality of subsets of the digitized scene image data are selected serially.

61. (original) The apparatus of claim 59 further comprising:
a reconstruction stage communicatively coupled to the processing stage and capable to reconstruct the selected plurality of subsets into an integrated output image.

62. (original) The apparatus of claim 59 wherein a subset corresponds to a focus area in the scene.

63. (original) The apparatus of claim 59 wherein one of the selected subsets of the digitized scene image data is selected based on detected activity in the scene.

64. (original) The apparatus of claim 59 wherein one of the selected subsets of the digitized scene image data is selected based on a location relative to another one of the selected subsets.

65. (original) The apparatus of claim 59 wherein one of the selected subsets of the digitized scene image data is selected based on a command signal.

66. (original) The apparatus of claim 59 wherein at least two of the selected subsets are overlapping.

67. (original) The apparatus of claim 59 wherein at least two of the selected subsets are non-overlapping.

68. (original) The apparatus of claim 59 wherein the processing stage further includes a webcam engine communicatively coupled to the memory and capable to select the subsets of the digitized data of the scene.

69. (canceled)

70. (currently amended) An apparatus for controlling the capture of an image of an object in a camera field of vision, the apparatus comprising:

a camera including a wide_angle lens capable to capture a scene within a field of vision of the wide_angle lens, wherein the wide_angle lens has a field of vision of at least about 140 degrees;

an image collection array communicatively coupled to the wide_angle lens and capable to store data of the scene within the field of vision;

a memory communicatively coupled to the image collection array and capable to store digitized data of the scene within the field of vision;

a webcam engine communicatively coupled to the memory and capable to select a plurality of subsets of the digitized data of the scene to simulate at least one function of the camera; and

an engine communicatively coupled to the memory and capable to perform distortion compensation on the subsets of the digitized data of the scene to compensate for distortion caused by the wide-angle lens.

71. (previously presented) The apparatus of claim 70 wherein one of the selected subsets of the digitized scene image data is selected based on detected activity in the scene.

72. (previously presented) The apparatus of claim 70 wherein one of the selected subsets of the digitized scene image data is selected based on a location relative to another one of the selected subsets.

73. (previously presented) The apparatus of claim 70 wherein one of the selected subsets of the digitized scene image data is selected based on a command signal.

74. (previously presented) The apparatus of claim 70 wherein at least two of the selected subsets are overlapping.

75. (previously presented) The apparatus of claim 70 wherein at least two of the selected subsets are non-overlapping.

76. (canceled)

77. (original) The apparatus of claim 70 wherein the camera is capable to transmit images to a destination device.

78. (currently amended) An apparatus for controlling the capture of an image of an object in a camera field of vision of a fish-eye lens, the apparatus comprising:

first means for storing, in an image collection array, data of a scene within the field of vision;

communicatively coupled to the first storing means, second means for storing, in memory, digitized data of the scene within the field of vision;

communicatively coupled to the second storing means, means for selecting a plurality of subsets of the digitized data of the scene to simulate at least one of the functions of a camera; and

communicatively coupled to the selecting means, means for performing distortion compensation on the subsets of the digitized data of the scene to compensate for distortion caused by the fish-eye lens.

79. (currently amended) An apparatus for capturing an image by use of a camera, the apparatus comprising:

means for placing a scene within a field of vision of a wide-angle lens coupled to the camera, wherein the wide-angle lens has a field of vision of at least about 140 degrees;

communicatively coupled to the placing means, means for storing image data of the scene in an image collection array;

communicatively coupled to the storing means, means for digitizing the scene image data into a digitized scene image data and for storing the digitized scene image data in memory;

communicatively coupled to the digitizing and storing means, means for selecting a plurality of subsets of the digitized data of the scene; and

communicatively coupled to the selecting means, means for performing distortion compensation on the selected subsets of the digitized scene image data to compensate for distortion caused by the wide-angle lens.

80. (previously presented) The method of claim 1, further comprising:

simultaneously displaying multiple subsets of the digitized scene image data.

81. (previously presented) The method of claim 23, further comprising:

performing distortion compensation on the subsets of the digitized data of the scene.

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82. (previously presented) The method of claim 81, wherein the performing distortion compensation is controlled by a first unit that is capable to transmit images in a network.

83. (previously presented) The method of claim 81, wherein the performing distortion compensation is controlled by a companion unit that is capable of being communicatively coupled to a first unit for transmitting images in a network.

84. (previously presented) The method of claim 81, wherein the performing distortion compensation is controlled by a processing device.

85. (previously presented) The article of manufacture of claim 45, wherein the machine-readable medium further comprises stored instructions to:
simultaneously display multiple subsets of the digitized data of the scene.

86. (previously presented) The apparatus of claim 46, further comprising:
a display module communicatively coupled to the processor and capable to simultaneously display multiple subsets of the stored digitized data of the scene.

87. (previously presented) The apparatus of claim 70, wherein the engine is capable to perform compression on the subsets of the digitized data of the scene.

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